

DESCRIPTION

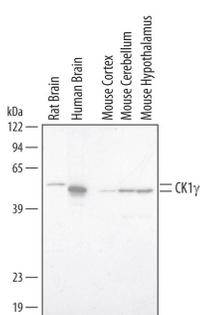
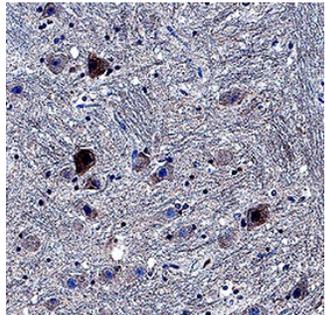
Species Reactivity	Human/Mouse/Rat
Specificity	Detects endogenous human, mouse, and rat CK1 γ in Western blots. In Western blots, the immunogen is derived from a region of human CK1 γ that is 97% to 98% identical to human CK1 γ^2 and CK1 γ^3 , so all three isoforms should be detected.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human CK1 γ Val182-Tyr304 Accession # Q9HCP0
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ m filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 μ g/mL	See Below
Immunohistochemistry	3-15 μ g/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human/Mouse/Rat Casein Kinase 1γ by Western Blot. Western blot shows lysates of human, mouse and rat brain tissue. PVDF membrane was probed with 1 μg/mL of Sheep Anti-Human/Mouse/Rat Casein Kinase 1γ Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3186) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). Specific bands were detected for CK1 gamma isoforms at approximately 45 to 51 kDa (as indicated). This experiment was conducted using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p>  <p>Casein Kinase 1γ in Human Brain. Casein Kinase 1γ was detected in immersion fixed paraffin-embedded sections of human brain (substantia nigra) using Sheep Anti-Human/Mouse/Rat Casein Kinase 1γ Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3186) at 3 μg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to neuronal cell bodies. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Casein Kinase 1 (CK1) represents a group of serine/threonine protein kinases that are present in all eukaryotic organisms. Human CK1 isoforms (α , β , γ^1 , γ^2 , γ^3 , δ and ϵ) act as monomeric constitutively active enzymes that phosphorylate key regulatory proteins involved in the control of cell differentiation, proliferation, chromosome segregation and circadian rhythms. CK1 family members share a highly conserved kinase domain but differ in their variable N- and C-terminal domains. The C-termini of the γ isoforms carry putative palmitoylation sites unique within the CK1 family that are believed to anchor the proteins in the plasma membrane.